



## CURRENT INDUSTRIAL REPORTS

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# Manufacturers' Shipments, Inventories, and Orders

June 1972



U. S. DEPARTMENT OF COMMERCE • Social and Economic Statistics Administration • BUREAU OF THE CENSUS

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### SUMMARY

New orders for manufactured products in June increased \$1.60 billion or 2.6 percent to \$63.07 billion after seasonal adjustment. Shipments decreased \$245 million or 0.4 percent to \$60.71 billion from \$60.96 billion in May. Unfilled orders increased \$2.36 billion or 3.0 percent to \$80.40 billion at the end of June. Manufacturers' inventories increased \$695 million to \$103.52 billion at the end of June. The inventories to shipments ratio increased from 1.69 to 1.71.

For the 3 months ending in June, the average month to month change in new orders was 1.3 percent increase compared with a 1.7 percent increase for the 3 months ending in March and a 1.5 percent increase for the 3 months ending in December.

### NEW ORDERS

New orders for durable goods increased \$1.29 billion or 3.8 percent to \$35.06 billion. An increase in the aerospace industry of \$1.10 billion was primarily responsible for this increase.

### SHIPMENTS

Shipments of durable goods decreased \$530 million or 1.6 percent to \$32.72 billion led by declines in motor vehicles (\$175 million) and shipbuilding and railroad equipment (\$150 million). Shipments of nondurable goods increased \$285 million or 1.0 percent.

### UNFILLED ORDERS

Unfilled orders for durable goods increased \$2.33 billion or 3.1 percent to \$76.86 billion at the end of June as increases in all segments were led by the aerospace industry (\$1.32 billion).

### INVENTORIES

Inventories of durable goods manufacturers increased \$320 million and of nondurable goods manufacturers increased \$375 million. At the all manufacturing level, materials and supplies showed no change, work-in-process increased \$470 million, and finished goods increased \$225 million.

### SCHEDULED RELEASE DATES

The figures on the durable goods industries in this report supersede those issued earlier in the advance report on durable goods. The advance report is based on a tabulation of early reports and is limited to statistics on shipments, new orders, and unfilled orders for a few broad industry categories. The present report is based on more complete reporting, but the estimates are also considered preliminary. Final figures will appear as historical data in the report to be published for next month. The advance report on durable goods for July is scheduled for release on August 21, 1972 and the full report is scheduled for release on August 30, 1972.

The data for May and prior months in this report are based on a revision of the monthly M3 series on shipments and orders. The monthly series has been benchmarked to the Annual Survey of Manufactures for the years 1966 to 1970 and new seasonal factors calculated. The revised figures for 1966 through March 1972, were published on June 28 in a report entitled M3-1.4, Manufacturers' Shipments, Inventories, and Orders: 1966-1972.

For an explanation of terms used in this report see appendix following table 5.

Inquiries concerning these figures should be addressed to the U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, Industry Division, Washington, D.C. 20233.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Shipments						Total inventories					
	Seasonally adjusted			Without seasonal adjustment <sup>1</sup>			Seasonally adjusted			Without seasonal adjustment <sup>1</sup>		
	June 1972 <sup>p</sup>	May 1972 <sup>r</sup>	Apr. 1972	June 1972 <sup>p</sup>	May 1972 <sup>r</sup>	June 1971	June 1972 <sup>p</sup>	May 1972 <sup>r</sup>	Apr. 1972	June 1972 <sup>p</sup>	May 1972 <sup>r</sup>	June 1971
All manufacturing industries:												
Total.....	60,714	60,957	60,741	64,464	61,475	59,207	103,519	102,822	102,428	103,674	103,777	101,775
Total, excluding transportation.....	53,641	53,473	53,345	56,794	53,639	51,705	87,556	87,100	86,892	88,018	88,120	86,891
Durable goods industries, total.	32,720	33,249	33,103	35,428	34,038	32,550	67,355	67,035	66,575	67,488	67,682	66,562
Stone, clay, and glass products.	1,980	2,017	1,929	2,162	2,079	1,795	2,278	2,260	2,272	2,325	2,345	2,341
Primary metals, total.....	4,982	4,930	5,032	5,515	5,313	5,480	9,689	9,600	9,553	9,559	9,547	9,045
Blast furnaces, steel mills.	2,317	2,358	2,397	2,653	2,594	2,902	5,376	5,284	5,247	5,241	5,220	4,775
Nonferrous metals.....	1,933	1,872	1,957	2,083	2,005	1,947	3,456	3,456	3,446	3,442	3,449	3,377
All other primary metals....	732	700	678	779	714	631	857	860	860	876	878	893
Fabricated metal products, total.....	3,409	3,442	3,442	3,657	3,461	3,431	7,125	7,185	7,122	7,309	7,335	7,789
Metal cans, barrels, and drums.....	456	458	459	515	461	436	718	722	729	773	768	838
Machinery, except electrical, total.....	5,570	5,564	5,549	6,076	5,681	5,341	13,474	13,396	13,390	13,493	13,533	13,840
Engines and turbines.....	454	428	379	535	437	514	1,260	1,251	1,254	1,232	1,263	1,117
Farm machinery and equipment	521	587	542	570	610	506	1,137	1,122	1,124	1,138	1,134	1,098
Construction, mining, and material handling equipment	868	866	906	951	891	858	2,483	2,501	2,488	2,495	2,531	2,643
Metalworking machinery.....	459	421	413	482	419	360	1,150	1,141	1,143	1,147	1,150	1,167
General industrial machinery	451	457	430	496	462	417	1,148	1,144	1,149	1,162	1,167	1,216
Electrical machinery, total...	4,611	4,670	4,783	4,960	4,521	4,421	9,957	9,968	9,888	10,163	10,242	10,163
Electrical transmission and distribution equipment and industrial apparatus.....	900	896	923	971	926	862	2,187	2,189	2,179	2,199	2,214	2,151
Household appliances.....	612	661	675	689	665	586	1,045	1,048	1,029	1,075	1,093	1,191
Radio and TV.....	394	433	444	456	301	437	836	809	799	889	902	779
Communication equipment.....	1,171	1,171	1,217	1,267	1,175	1,260	2,905	2,934	2,923	2,946	2,981	2,931
Transportation equipment, total	7,073	7,484	7,396	7,670	7,836	7,502	15,963	15,722	15,536	15,656	15,657	14,884
Motor vehicles and parts....	4,446	4,620	4,720	4,971	4,918	4,465	4,170	4,128	4,086	3,920	4,053	4,110
Aircraft, missiles, and parts.....	1,857	1,942	1,839	1,862	1,959	2,137	9,105	8,972	8,951	9,094	9,012	8,710
Shipbuilding and railroad equipment.....	470	617	524	494	619	625	2,055	1,988	1,895	2,020	1,950	1,526
Instruments and related products, total.....	986	1,028	1,044	1,063	1,014	1,021	2,481	2,539	2,510	2,546	2,588	2,433
Scientific and engineering..	502	520	539	546	516	505	1,480	1,477	1,471	1,505	1,508	1,422
All other instruments and related products.....	484	508	505	517	498	516	1,001	1,062	1,039	1,041	1,080	1,011
All other durable goods industries.....	4,109	4,114	3,928	4,325	4,133	3,559	6,388	6,365	6,304	6,437	6,435	6,067
Nondurable goods industries, total.....	27,994	27,708	27,638	29,036	27,437	26,657	36,164	35,787	35,853	36,186	36,095	35,213
Food and kindred products, total.....	9,220	9,195	9,026	9,504	9,050	8,667	9,088	8,987	9,111	8,800	8,802	8,609
Meat products.....	2,096	2,181	2,192	2,146	2,188	2,023	839	807	805	836	833	821
Fats and oils.....	516	471	458	525	476	500	686	710	720	654	701	655
Tobacco products.....	504	511	501	546	520	525	2,218	2,231	2,260	2,127	2,208	2,033
Textile mill products.....	2,444	2,294	2,338	2,580	2,244	2,172	3,829	3,817	3,780	3,946	3,963	3,694
Paper and allied products, total.....	2,365	2,343	2,342	2,472	2,332	2,223	2,744	2,749	2,731	2,788	2,788	2,781
Pulp, paper, etc.....	937	938	930	970	933	919	1,040	1,044	1,045	1,051	1,054	1,075
Paperboard containers.....	718	728	706	750	732	655	826	826	823	835	835	817
All other paper containers..	710	677	706	752	667	649	878	879	863	902	899	889
Chemicals and allied products, total.....	4,811	4,635	4,680	5,043	4,819	4,579	6,701	6,663	6,648	6,698	6,692	6,747
Industrial chemicals, except pigments.....	1,471	1,417	1,412	1,553	1,486	1,451	1,887	1,894	1,888	1,856	1,873	1,884
Drugs, soap, and toiletries.	1,533	1,449	1,436	1,512	1,342	1,331	2,137	2,117	2,082	2,196	2,158	2,131
Petroleum and coal products...	2,298	2,248	2,359	2,383	2,233	2,190	2,232	2,208	2,199	2,207	2,192	2,220
Rubber and plastics products, n.e.c.....	1,426	1,456	1,464	1,530	1,500	1,455	2,315	2,274	2,230	2,304	2,281	2,117
All other nondurable goods industries.....	4,926	5,026	4,928	4,978	4,739	4,846	7,037	6,858	6,894	7,316	7,169	7,012

See footnotes at end of table.

Table 1.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, BY INDUSTRY GROUP--Continued

(Millions of dollars)

Industry group	New orders						Unfilled orders					
	Seasonally adjusted			Without seasonal adjustment <sup>1</sup>			Seasonally adjusted			Without seasonal adjustment <sup>1</sup>		
	June 1972 <sup>p</sup>	May 1972 <sup>r</sup>	Apr. 1972	June 1972 <sup>p</sup>	May 1972 <sup>r</sup>	June 1971	June 1972 <sup>p</sup>	May 1972 <sup>r</sup>	Apr. 1972	June 1972 <sup>p</sup>	May 1972 <sup>r</sup>	June 1971
All manufacturing industries:												
Total.....	63,074	61,475	61,209	65,793	61,063	56,977	80,402	78,045	77,528	79,322	77,993	72,785
Total, excluding transportation.....	54,765	54,143	53,568	57,349	53,643	50,447	54,684	53,562	52,893	54,351	53,796	50,688
Durable goods industries, total..	35,058	33,765	33,529	36,758	33,590	30,317	76,855	74,521	74,005	75,728	74,398	69,747
Primary metals, total.....	5,465	5,339	4,999	5,520	5,278	4,314	7,242	6,759	6,350	7,050	7,046	5,792
Blast furnaces, steel mills..	2,751	2,659	2,343	2,699	2,547	1,853	4,340	3,907	3,606	4,218	4,173	3,169
Nonferrous metals.....	1,975	1,961	1,994	2,044	1,999	1,862	2,006	1,963	1,874	1,934	1,973	1,761
Fabricated metal products.....	3,508	3,371	3,395	3,733	3,390	3,337	9,654	9,556	9,626	9,667	9,593	9,937
Machinery, except electrical, total.....	5,884	5,668	5,654	6,304	5,721	5,372	13,572	13,258	13,156	13,548	13,320	12,282
Engines and turbines.....	667	428	431	711	419	522	3,784	3,572	3,572	3,753	3,577	3,318
Construction, mining, and material handling equipment..	908	902	904	984	933	899	2,522	2,482	2,446	2,567	2,534	2,287
Metalworking machinery.....	482	432	427	495	434	365	1,042	1,019	1,008	1,029	1,016	975
General industrial machinery..	450	433	434	480	431	404	1,270	1,271	1,296	1,271	1,286	1,152
Electrical machinery, total...	4,790	4,841	4,833	5,128	4,527	4,349	14,347	14,171	13,999	14,109	13,940	13,517
Electrical transmission and distribution equipment and industrial apparatus.....	930	872	981	1,013	921	842	3,897	3,869	3,892	3,932	3,889	3,796
Household appliances.....	625	651	678	687	657	574	133	120	130	124	126	128
Radio and TV.....	451	456	483	564	345	434	633	576	553	674	566	455
Communication equipment.....	1,200	1,257	1,148	1,221	1,054	1,202	5,991	5,963	5,877	5,667	5,713	5,471
Transportation equipment, total.....	8,309	7,332	7,641	8,444	7,420	6,530	25,718	24,483	24,635	24,971	24,197	22,097
Aircraft, missiles, and parts.....	3,180	2,079	2,081	2,874	1,810	1,321	16,012	14,689	14,553	15,511	14,499	13,358
Shipbuilding and railroad equipment.....	381	462	530	370	556	573	5,257	5,346	5,500	5,201	5,324	5,164
All other durable goods industries.....	7,102	7,214	7,007	7,629	7,254	6,415	6,322	6,294	6,239	6,383	6,302	6,122
Nondurable goods industries, total.....	28,016	27,710	27,680	29,035	27,473	26,660	3,547	3,524	3,523	3,594	3,595	3,038
Industries with unfilled orders.....	7,620	7,489	7,533	7,870	7,425	6,940	3,547	3,524	3,523	3,594	3,595	3,038
Industries without unfilled orders.....	20,396	20,221	20,147	21,165	20,048	19,720	-	-	-	-	-	-

- Represents zero. <sup>p</sup> Preliminary. <sup>r</sup> Revised.<sup>1</sup> Adjusted for trading-day and calendar-month variations.



Table 2.--VALUE OF MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS, FOR MARKET CATEGORIES AND SUPPLEMENTARY SERIES  
(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment <sup>1</sup>			Seasonally adjusted			Without seasonal adjustment		
	June 1972 <sup>P</sup>	May 1972 <sup>R</sup>	Apr. 1972	June 1972 <sup>P</sup>	May 1972 <sup>R</sup>	June 1971	June 1972 <sup>P</sup>	May 1972 <sup>R</sup>	Apr. 1972	June 1972 <sup>P</sup>	May 1972 <sup>R</sup>	June 1971
	Shipments						Total inventories					
All manufacturing industries, total..	60,714	60,957	60,741	64,464	61,475	59,207	103,519	102,822	102,428	103,674	103,777	101,775
Durable goods industries, total.....	32,720	33,249	33,103	35,428	34,038	32,550	67,355	67,035	66,575	67,488	67,682	66,562
Nondurable goods industries, total.....	27,994	27,708	27,638	29,036	27,437	26,657	36,164	35,787	35,853	36,186	36,095	35,213
Industry groups arranged by market categories:												
Home goods and apparel.....	6,198	6,242	6,231	6,453	5,800	5,895	11,289	11,113	10,960	11,759	11,686	11,034
Consumer staples.....	11,929	11,918	11,662	12,214	11,671	11,198	13,930	13,780	13,901	13,647	13,635	13,321
Equipment and defense products, except automotive.....	8,776	9,017	8,836	9,412	9,116	8,882	26,766	26,597	26,523	26,834	26,823	26,344
Automotive equipment.....	5,176	5,381	5,473	5,790	5,726	5,191	5,560	5,499	5,413	5,286	5,439	5,327
Construction materials, supplies, and intermediate products.....	5,466	5,496	5,389	5,992	5,692	5,275	8,164	8,164	8,118	8,266	8,300	8,292
Other materials and supplies and intermediate products.....	23,169	22,903	23,150	24,603	23,470	22,766	37,810	37,669	37,513	37,882	37,894	37,457
Supplementary series: <sup>2</sup>												
Household durable goods industries.....	2,849	2,913	2,883	3,015	2,770	2,526	5,192	5,171	5,029	5,338	5,380	5,082
Capital goods industries.....	10,324	10,448	10,320	11,013	10,542	10,403	30,185	29,939	29,824	30,273	30,188	29,775
Nondefense.....	8,690	8,694	8,574	9,260	8,800	8,040	24,537	24,326	24,208	24,584	24,548	24,700
Defense*.....	1,634	1,754	1,746	1,753	1,742	2,363	5,648	5,613	5,616	5,689	5,640	5,075
	New orders						Unfilled orders					
All manufacturing industries, total..	63,074	61,475	61,209	65,793	61,063	56,977	80,402	78,045	77,528	79,322	77,993	72,785
Durable goods industries, total.....	35,058	33,765	33,529	36,758	33,590	30,317	76,855	74,521	74,005	75,728	74,398	69,747
Nondurable goods industries, total.....	28,016	27,710	27,680	29,035	27,473	26,660	3,547	3,524	3,523	3,594	3,595	3,038
Industry groups arranged by market categories:												
Home goods and apparel.....	6,301	6,359	6,290	6,585	5,946	5,904	2,626	2,539	2,421	2,632	2,513	2,079
Consumer staples.....	11,913	11,919	11,666	12,199	11,668	11,185						
Equipment and defense products, except automotive.....	10,272	8,895	9,012	10,544	8,622	8,288	42,636	41,142	41,398	41,697	40,677	38,436
Automotive equipment.....	5,178	5,247	5,470	5,676	5,522	5,087						
Construction materials, supplies, and intermediate products.....	5,508	5,470	5,355	6,029	5,646	5,211	9,420	9,379	9,406	9,502	9,465	9,685
Other materials and supplies and intermediate products.....	23,902	23,585	23,416	24,760	23,659	21,302	25,720	24,985	24,303	25,491	25,338	22,585
Supplementary series: <sup>2</sup>												
Household durable goods industries.....	2,950	3,012	2,945	3,152	2,888	2,544	2,179	2,077	1,977	2,169	2,031	1,707
Capital goods industries.....	11,967	10,569	10,744	12,215	10,207	9,534	46,494	44,853	44,733	45,670	44,466	41,951
Nondefense.....	9,173	9,036	8,785	9,611	8,974	7,923	26,323	25,842	25,502	26,270	25,917	25,516
Defense*.....	2,794	1,533	1,959	2,604	1,233	1,611	20,171	19,011	19,231	19,400	18,549	16,435

\*During 1968 manufacturers in ordnance, communications, aircraft and aircraft parts, and ship building industries began to provide aggregate figures on shipments, orders, and total inventories of work performed for the Department of Defense. The results of these reports are included in these new defense series. Since there are no historical data available to develop separate seasonal factors for these reporters, the data have been seasonally adjusted using the factors of these industries. <sup>P</sup>Preliminary. <sup>R</sup>Revised. <sup>1</sup>Shipments and new orders adjusted for trading-day and calendar-month variations; unfilled orders and inventories as of end of month. The supplementary series are regroupings of the separate industry categories as follows:

Household durable goods industries - Household furniture; kitchen articles and pottery; cutlery, handtools, and hardware; household appliances; ophthalmic goods, watches, and clocks; and miscellaneous personal goods.  
Capital goods industries - The capital goods industries series is comparable to the previous Producers' Capital Goods and the Defense Products (old series) categories.  
Nondefense industries - Machinery, except electrical machinery (excluding household appliances and electronic components), and the nondefense portions of shipbuilding and repairing and railroad equipment, communication equipment, aircraft, aircraft parts, and ordnance.  
Defense products (new series) - Based on separate reports on defense work filed by large defense contractors in the following industries: ordnance, communications, complete aircraft, aircraft parts, and shipbuilding. Thus, it differs from the old series in that it includes defense activity in shipbuilding and excludes nondefense work in ordnance, communications, complete aircraft, and aircraft parts. The data are comparable to those published annually in the MA-175, Shipments of Defense-Oriented Industries, for the specified industries.

Table 3.--MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS MONTH-TO MONTH AND LONG TERM PERCENT CHANGES

(Based on seasonally adjusted data)

Item and industry group	Month-to-month			Average monthly rates of change				Average, 1966-1971	
	May- June 1972	Apr.- May 1972	Mar.- Apr. 1972	3 months			12 months	Average rise	Average decline
				Mar. 1972- June 1972	Dec. 1971- Mar. 1972	Sept. 1971- Dec. 1971	June 1971- June 1972		
Shipments:									
All manufacturing industries.....	-0.4	+0.4	+1.4	+0.5	+1.4	+1.3	+0.7	+1.2	-1.1
Durable goods industries, total.....	-1.6	+0.4	+2.7	+0.5	+1.8	+1.4	+0.7	+1.9	-1.7
Nondurable goods industries, total.....	+1.0	+0.3	-0.1	+0.4	+1.0	+1.2	+0.7	+0.8	-0.5
Total inventories:									
All manufacturing industries.....	+0.7	+0.4	0.0	+0.4	+0.3	+0.1	+0.2	+0.5	-0.2
New orders:									
All manufacturing industries.....	+2.6	+0.4	+1.0	+1.3	+1.7	+1.5	+1.2	+1.8	-1.4
Durable goods industries, total.....	+3.8	+0.7	+2.1	+2.2	+2.3	+1.7	+1.7	+2.8	-2.7
Nondurable goods industries, total.....	+1.1	+0.1	-0.3	+0.3	+1.1	+1.3	+0.7	+0.9	-0.5
Unfilled orders:									
Durable goods industries, total.....	+3.1	+0.7	+0.6	+1.5	+0.8	+0.5	+0.7	+0.7	-1.1

Table 4.--VALUE OF MANUFACTURERS' INVENTORIES, BY STAGE OF FABRICATION, BY INDUSTRY GROUP

(Millions of dollars)

Industry group	Seasonally adjusted			Without seasonal adjustment			Seasonally adjusted			Without seasonal adjustment		
	June 1972 <sup>P</sup>	May 1972 <sup>r</sup>	Apr. 1972	June 1972 <sup>P</sup>	May 1972 <sup>r</sup>	June 1971	June 1972 <sup>P</sup>	May 1972 <sup>r</sup>	Apr. 1972	June 1972 <sup>P</sup>	May 1972 <sup>r</sup>	June 1971
	Total						Materials and supplies					
All manufacturing industries, total..	103,519	102,822	102,428	103,674	103,777	101,755	30,934	30,933	30,937	30,657	30,755	31,112
Durable goods industries, total.....	67,355	67,035	66,575	67,488	67,682	66,562	17,940	18,152	18,101	17,859	17,979	18,734
Stone, clay, and glass products.....	2,278	2,260	2,272	2,325	2,345	2,341	770	761	757	771	762	756
Primary metals.....	9,689	9,600	9,553	9,559	9,547	9,045	3,517	3,516	3,530	3,428	3,369	3,254
Machinery (electrical and nonelectrical).	23,431	23,364	23,278	23,656	23,775	24,003	5,774	5,808	5,803	5,814	5,839	5,961
Transportation equipment.....	15,963	15,722	15,536	15,656	15,657	14,884	2,703	2,781	2,778	2,602	2,744	3,136
All other durable goods industries.....	15,994	16,089	15,936	16,292	16,358	16,289	5,176	5,286	5,233	5,244	5,265	5,627
Nondurable goods industries, total.....	36,164	35,787	35,853	36,186	36,095	35,213	12,994	12,781	12,836	12,798	12,776	12,378
Chemicals and allied products.....	6,701	6,663	6,648	6,698	6,692	6,747	2,213	2,141	2,165	2,205	2,138	2,249
Petroleum and coal products.....	2,232	2,208	2,199	2,207	2,192	2,220	514	505	503	516	512	508
Rubber and plastics products, n.e.c.....	2,315	2,274	2,230	2,304	2,281	2,117	668	670	667	670	663	652
All other nondurable goods industries.....	24,916	24,642	24,776	24,977	24,930	24,129	9,599	9,465	9,501	9,407	9,463	8,969
	Work in process						Finished goods					
All manufacturing industries, total..	36,762	36,293	36,068	36,623	36,544	34,985	35,823	35,596	35,423	36,394	36,478	35,678
Durable goods industries, total.....	31,496	31,103	30,794	31,288	31,251	29,854	17,919	17,780	17,680	18,341	18,452	17,974
Stone, clay, and glass products.....	314	310	317	319	321	337	1,194	1,189	1,198	1,235	1,262	1,248
Primary metals.....	3,210	3,156	3,133	3,158	3,156	2,947	2,962	2,928	2,890	2,973	3,022	2,844
Machinery (electrical and nonelectrical).	10,580	10,537	10,461	10,539	10,638	10,811	7,077	7,019	7,014	7,303	7,298	7,231
Transportation equipment.....	11,799	11,476	11,328	11,606	11,442	10,270	1,461	1,465	1,430	1,448	1,471	1,478
All other durable goods industries.....	5,593	5,624	5,555	5,666	5,694	5,489	5,225	5,179	5,148	5,382	5,399	5,173
Nondurable goods industries, total.....	5,266	5,190	5,274	5,335	5,293	5,131	17,904	17,816	17,743	18,053	18,026	17,704
Chemicals and allied products.....	879	857	871	878	862	872	3,609	3,665	3,612	3,615	3,692	3,626
Petroleum and coal products.....	490	484	478	501	491	497	1,228	1,219	1,218	1,190	1,189	1,215
Rubber and plastics products, n.e.c.....	371	364	353	368	359	336	1,276	1,240	1,210	1,266	1,259	1,129
All other nondurable goods industries.....	3,526	3,485	3,572	3,588	3,581	3,426	11,791	11,692	11,703	11,982	11,886	11,734

<sup>P</sup>Preliminary.<sup>r</sup>Revised.

Table S.--RATIO OF MANUFACTURERS' INVENTORIES TO SHIPMENTS AND UNFILLED ORDERS TO SHIPMENTS, BY INDUSTRY GROUP

(Based on seasonally adjusted data)

Industry group	Inventories - shipments ratio				Unfilled orders - shipments ratio <sup>1</sup> (months' backlog)			
	June 1972 <sup>P</sup>	May 1972 <sup>F</sup>	Apr. 1972	June 1971	June 1972 <sup>P</sup>	May 1972 <sup>F</sup>	Apr. 1972	June 1971
All manufacturing industries, total.....	1.71	1.69	1.69	1.82	2.13	2.05	2.05	2.13
Durable goods industries, total.....	2.06	2.02	2.01	2.21	2.55	2.44	2.43	2.55
Stone, clay, and glass products.....	1.15	1.12	1.18	1.39	(NA)	(NA)	(NA)	(NA)
Primary metals.....	1.94	1.95	1.90	1.85	1.45	1.37	1.26	1.20
Fabricated metals.....	2.09	2.09	2.07	2.37	3.27	3.20	3.23	3.52
Machinery, except electrical.....	2.42	2.41	2.41	2.82	2.44	2.38	2.37	2.51
Electrical machinery.....	2.16	2.13	2.07	2.43	3.11	3.03	2.93	3.35
Transportation equipment.....	2.26	2.10	2.10	2.20	4.94	4.45	4.59	4.35
Instruments and related products.....	2.52	2.47	2.40	2.49	(NA)	(NA)	(NA)	(NA)
Nondurable goods industries, total.....	1.29	1.29	1.30	1.37	0.47	0.47	0.47	0.44
Food and kindred products.....	0.99	0.98	1.01	1.06	(X)	(X)	(X)	(X)
Tobacco products.....	4.40	4.37	4.51	4.37	(X)	(X)	(X)	(X)
Textile mill products.....	1.57	1.66	1.62	1.74	(NA)	(NA)	(NA)	(NA)
Paper and allied products.....	1.16	1.17	1.17	1.29	(NA)	(NA)	(NA)	(NA)
Chemicals and allied products.....	1.39	1.44	1.42	1.55	(X)	(X)	(X)	(X)
Petroleum and coal products.....	0.97	0.98	0.93	1.06	(X)	(X)	(X)	(X)
Rubber and plastics products, n.e.c.....	1.62	1.56	1.52	1.57	(X)	(X)	(X)	(X)

(NA) Not available. <sup>P</sup>Preliminary. <sup>F</sup>Revised. (X) Not applicable.<sup>1</sup>Excludes the following industries with no unfilled order: Wooden containers; glass containers; metal cans, barrels and drums; motor vehicle assembly operations; foods and related products; tobacco; apparel and related products; chemicals; petroleum and coal products; and rubber and plastics products, n.e.c.



## Appendix

The following is a description of the survey and definitions used. These are provided to clarify the meaning of the items involved and do not represent any revisions from those definitions previously employed.

### DESCRIPTION OF THE SURVEY

The Manufacturers' Shipments, Inventories, and Orders survey provides monthly figures that are comparable to the annual totals published each year in the annual survey of manufactures (ASM). The ASM is based on a sample of approximately 60,000 manufacturing establishments drawn from the 5-year census universe of about 310,000 establishments. In the ASM, each manufacturing establishment provides data on employment, payrolls, shipments, cost of materials, capital expenditures, and inventories as well as other selected items. The establishments do not provide information on unfilled orders or new orders. Since the ASM is establishment based, it provides data for each of the 425 manufacturing industries in the Standard Industrial Classification System (SIC) and area data for industry groups.

The monthly survey M3-1 does not provide information at the complete SIC industry detail because of the smaller size of the reporting panel and the fact that most companies cannot provide shipments, inventories, and orders data monthly for individual establishments.

The monthly reporting panel consists of approximately 5,000 reporting units and includes virtually all companies with 1,000 or more employees and a sample of the smaller ones. The reporting unit typically comprises the entire operations of a company although many of the larger diversified companies file separate divisional type reports for their operations in different industries.

Most of the reporting units include mixed industry activity even within the broad industry categories of the monthly survey. The survey methodology assumes that the month-to-month changes of the reporting units classified in each industry category represent effectively the month-to-month movements of the establishments in the SIC industries which make up the category. Thus, the monthly reports are used to update the ASM estimates by using a link relative of matched companies in each industry.

### EXPLANATION OF TERMS

**Value of Shipments--**Shipments in the monthly survey are equivalent to value of shipments as reported in the ASM which are received or receivable net selling values, f.o.b. plant, after discounts and allowances and excluding freight charges and excise taxes. Included in shipments are the value of all products sold, transferred to other plants of the same company, or shipped on consignment.

Shipments also include receipts of establishments in the industry for contract work performed for others, resales, receipts for miscellaneous activities such as the sale of scrap and refuse; value of installation and repair work performed by employees of the plant; and value of research and development performed at the plant. In the aircraft industry and shipbuilding, the value of work done in a given year varies considerably from the value of shipments because of the long lead time between the input of the materials and labor and the shipments of the completed aircraft or ship. In the annual survey, therefore, the value of work done during the year is requested rather than the value of shipments.

The value of shipments figures developed from the ASM contain duplication at the all manufacturing and industry group levels since the products of some industries are used as materials by other industries within the industry group. With the exception of motor vehicles, it is not significant at the 4-digit SIC group level. Since the M3-1 industry categories typically are groupings of industries, this duplication is significant for the all manufacturing, durable goods and nondurable goods categories and the various market groups. The significance of the duplication within the specific M3-1 industry groups varies depending on the 4-digit industry composition of these groups. It is most pronounced in a few highly integrated industry areas such as primary metals and motor vehicles and parts.

Since most monthly reports are for the entire company or major divisions rather than establishments, the companies are requested to report net sales, i.e., total company billings after discounts and allowances. Companies which file divisional reports are requested to treat transfers from one division of the company to another as if they were net sales to outside customers. Although this



definition of shipments in the monthly reports differs from that used in the annual establishment reports, it is assumed that the month-to-month changes in company sales in the industry are representative of the month-to-month shipments of the establishments in the industry.

**Inventories--**End-of-month inventories in the monthly survey are identical in definition to the end-of-year inventories in the ASM. In the ASM, respondents are asked to report inventories of individual establishments at approximate current cost if feasible; otherwise, "at book values." Since different methods of inventory valuation are used (LIFO, FIFO, etc.), the definition of the aggregate inventories for establishments in an industry is not precise. The figures on the change in inventories from one period to the next are of greater significance than the actual aggregates.

Inventories are reported by stage of fabrication: (a) finished goods; (b) work in process; and (c) materials, supplies, fuel, and other inventories. In using inventories by stage of fabrication at the all manufacturing and 2-digit industry levels as well as for the durable and nondurable goods sectors, it should be noted that a finished product of one industry may be a raw material for another industry at the next stage of fabrication. Insofar as the durable and nondurable goods sectors and also the 2-digit industry groups contain industries with successive stages of processing, the same type of commodity may be included under different inventory categories in the aggregate statistics.

### **New Orders Received and Unfilled Orders--**

Orders as reported in the monthly survey are net of cancellations during the month. They include orders received during the period and also filled during the period as well as those orders received for future delivery. They also include the net sales value of contract change documents which increase or decrease the sales value of the unfilled orders to which they relate. Orders include only those supported by binding legal documents such as signed contracts, or letter contracts. In case of letter contracts the full amount of the sales value is included if the parties are in substantial agreement on the amount; otherwise, only the funds specifically authorized to be expended are included. The respondent is instructed to deduct the sales value of partial or complete cancellation of existing orders.

Unfilled orders include orders as defined above that have not yet passed through the sales account. Generally, unfilled orders at the end of the reporting period are equal to unfilled orders at the beginning of the period plus net new orders received less net sales.

While both new orders and unfilled orders are used in reviewing individual company reports for consistency, only unfilled orders are estimated directly in the tabulated totals. New orders are derived from the shipments plus net change in unfilled orders for each industry category. This procedure is followed for seasonally adjusted data as well as for the unadjusted data. Shipments and unfilled orders are seasonally adjusted independently. Seasonally adjusted new orders are derived from seasonally adjusted shipments and seasonally adjusted unfilled orders.